

# LeanMAX

## Users Manual

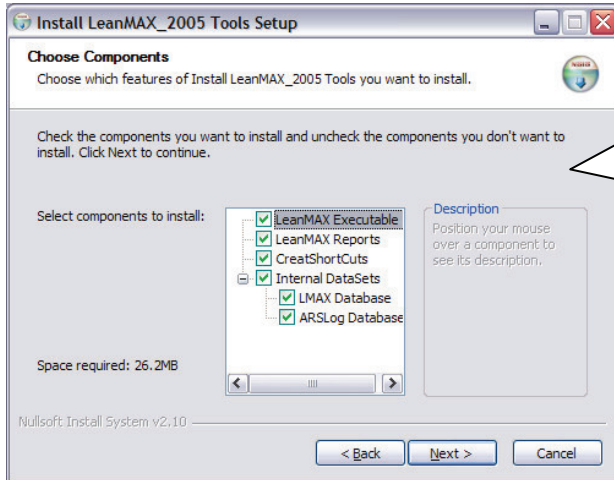
Version 2006 for MAX v4

# Standard Configuration

**Table of Contents:**

Installation: ..... 3  
Login: ..... 3  
Settings: ..... 5  
ARSMsg: ..... 6  
Consolidated Plan and Pick: ..... 8  
    Planning Function: ..... 8  
    Pick Function: ..... 9  
Kanban Replenishment: ..... 12  
Back Flush By Operation: ..... 14  
PickPro Function: ..... 15

**Installation:**



Install by running InstallLeanMAX\_2005.EXE and follow the prompts for where you LeanMAX installed.

The current MAX paths will be retrieved from the local registry and can be changed as need using the Data Settings tab. The registry can be found under Settings. Enter the name and password supplied with the software.

**MAX Business Logic:**

1. LeanMAX uses MAXUpdate for processing standard transactions. MAXUpdate is a set of DLL's that provide a library of MAX functions. MAXUpdate is a separate module provided by Exact, please consult with the MAXUpdate documentation for more information.
2. Copy the following MAXUpdate files into the application folder or make them available from a search path:

MAX DLL'S
MAXEXEC2 DLL
MAXBTRV2 DLL
MAXTRAN2 DLL
MAXORDR2.DLL

MAXORD2.DLL is only needed for KANBAN functions.

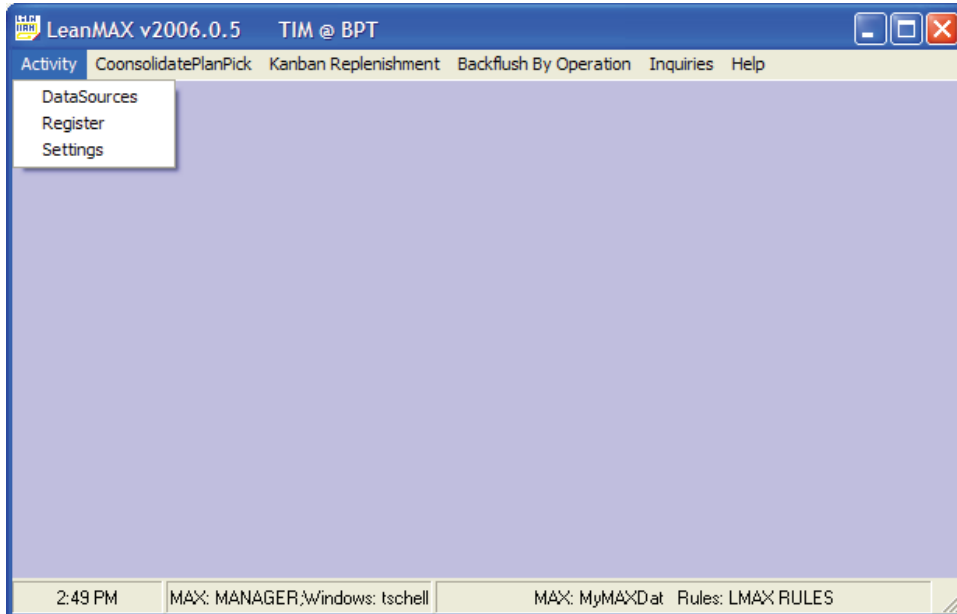
These files will be installed by the MAX Client Setup routine in \MAX\MFW2 and will reside in the server in \EXACT\MAX\NET\UPDATES\MFW2. As MAX is updated it is important to also update the files that are used by this application.

**Login:**

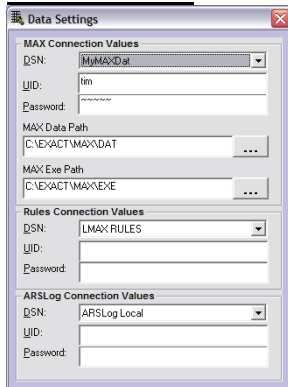
The user and password will be verified with the MAX Security table and requires the user to have a supervisor level in the MRP module.



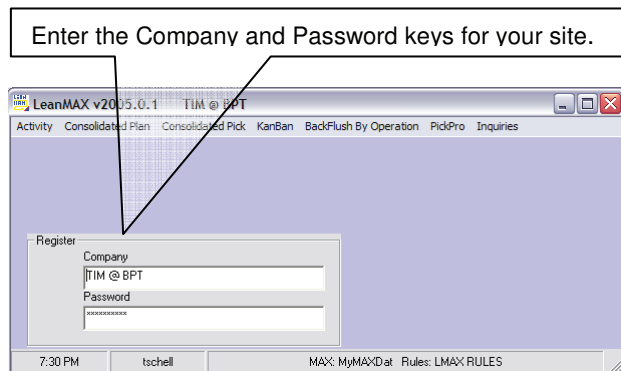
## Main Menu:



## Data Sources:



## Register:



1. MAX DSN, Data and EXE locations.
2. Rules Database DSN - LMAX RULES will be generated initially for LMAX.MDB located in the \Data folder within the installed to folder for the application.
3. ARSLog Database DSN - ARSLog Local will be generated initially for ARSLog.MDB located in the \Data folder when the ARSMsg application is first started. *This database is only required if using Kanban processing with automatic emails.*

**Settings:**

This form is used to select switches and parameters. These switches are stored in the LMAX database.

**Back Flush by Operation:**

1. Update the Job Progress Queue quantity.
2. Select default issue from location.

**KanBan:**

1. Authorized Buyer – partial match allowed.
2. Due Past / Prior – date horizon.
3. PO Generation Days - if an existing PO is found within this time frame it will be added to.
4. Look For Stock ID on Scan – scan contains both part and stock ID separated by a delimiter.

**Stock ID's for Picks:** this Stock ID's selected here determine which orders are selected in the Pick process. Only Orders with requirements having a default Stock ID on this list will display. Selected Stock ID's have UDFKEY\_05 set to ".cp.".

**Order Date Selection:** determines the date sequence of the Planning Screens.

**Generate Kanban Orders:** select whether to generate Kanban type supply orders and at approval or release.

**Internal Customer ID:** Identify the internal customer ID to be used to cross reference Model with Part ID using the Customer Part Data table which is maintained as part of part sales.

**ARSMsg:**

Utility that is used to send emails.

Data Source:

1. Enter MAX DSN, ODBC User, and Password if used.
2. ARSLog DSN, User and Password.

**Email Setup:**

1. Enter the SMTP outbound eMail server.
2. Enter the From display name and From Email address.
3. Enter the Internal Email address (for exceptions) – these are optional.
4. Enter CC addresses.
5. Enter Subject
6. Mail User and Password
7. Enter the Individual PO Crystal and attachment type.
8. Enter the Summary PO Crystal Name and attachment type.
9. If using Lean Turn Around with Lean Vouchering end the name of the Crystal. This Crystal will be used to export an Excel file for turnaround as a ship document by the vendor. The default Crystal is: [LeanMAXTurnAround.rpt](#) and is installed within the \Reports folder.

The main form can be used to send a simple email based on the selected Purchase Order. The Vendor's Email address is the default, but can be changed on the form.

The SendDay function is used to send the accumulated emails grouped by vendor.

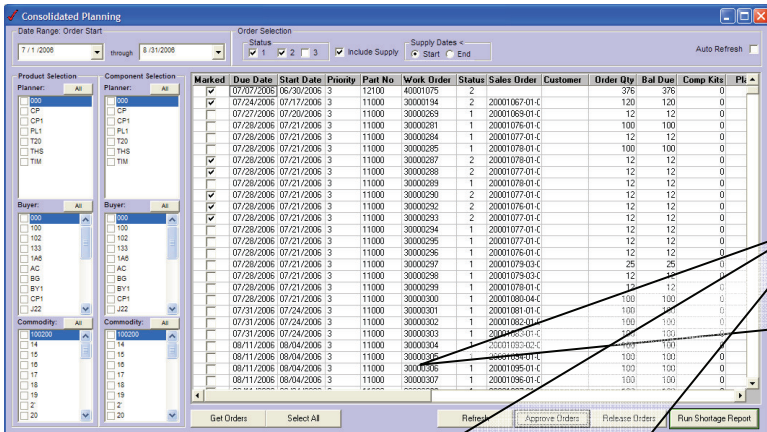
As a scheduled function use ARSMMSG.EXE SENDDAY in the command line.

Email Log: log of batched orders

E-Mail Log															
Refresh															
Individual EMail				Batch EMail											
<input checked="" type="radio"/> All	<input type="radio"/> Sent	<input type="radio"/> UnSent		<input type="radio"/> All	<input checked="" type="radio"/> Sent	<input type="radio"/> UnSent									
DUE DATE	Quantity	PARTDESC	RevLe	Cost	MPNNUM	MPNMfg	Buyer	EMAIL	:NTTimeStar	Sent	hSentTimeSl	BatchSent			
09/14/06	20,000.00	TEST UNIT 24 VOLT	A	44.77	U13000	MFG3000	TIM	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
09/14/06	20,155.00	Resistor, 100 Ohm	A	0			TED	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
09/14/06	80.00	Resistor, 100 Ohm	A	0			TED	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
09/22/06	20,000.00	TEST UNIT 24 VOLT	A	44.77	U13000	MFG3000	TIM	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
09/22/06	20,155.00	Resistor, 100 Ohm	A	0			TED	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
10/14/05	832.00	LOT TESTER	B	22.00				tschell@bptechnologies.coi	09/14/06	True	09/14/06	True			
09/12/06	3,500.00	KANBAN 2		29.78	700-888	ACME METAL F	TIP	t@bptechnologies.com	09/14/06	True	09/14/06	True			
09/14/06	4,000.00	KANBAN PART 1		40.00	KBMFGPART1	KMFG1	TIM	ISCHELL@bptechnologies.	09/14/06	True	09/14/06	True			
09/15/06	100.00	KANBAN PART 1	33	22.00	KBMFGPART2	KBMFG2	TIM	INFO@BPTECHNOLOGIE\$	09/14/06	True	09/14/06	True			
09/22/06	1,000,825.00	KANBAN PART 1		22.00	KBMFGPART2	KBMFG2	TIM	INFO@BPTECHNOLOGIE\$	09/14/06	True	09/14/06	True			
09/26/06	1,000,825.00	KANBAN PART 1		22.00	KBMFGPART2	KBMFG2	TIM		09/14/06	True	09/14/06	True			
09/28/06	4,000.00	KANBAN PART 1		0	KBMFGPART1	KMFG1	TIM		09/14/06	True	09/14/06	True			

**Consolidated Plan and Pick:**

**Planning Function:**



A right click on any line will display the requirements detail related to the work order.

Part ID	DefSik	Qty Per	IssQty	DueQty	On Hand
12100	MSI	1	0	100	1196.01
13000	RMI	1	0	100	2309
13100	RMI	1	0	100	1361
13990	MSI	2	0	200	98
HITOPPER		1	0	100	0

A right click on the requirements tab will show all other requirements for the same component.

Priority	Order	Parent	DueDate	ReqQty	SO
0	5000011	11000	7/6/2006	200	
0	5000005	11000	7/6/2006	200	
0	5000011	11000	9/5/2006	200	
0	5000011	11000	9/21/2006	150	
0	5000011	11000	8/11/2006	200	
0	5000011	11000	8/11/2006	200	
0	5000011	11000	7/27/2006	200	
0	5000006	11000	7/19/2006	200	
0	5000005	11000	7/18/2006	200	
0	5000005	11000	7/18/2006	200	
0	5000012	11000	9/7/2006	200	
1	3000000	11050	11/19/2003	75	200000560201
1	3000004	11000	9/9/2004	194	
3	3000000	11000	9/19/2002	97	
3	5000000	11000	12/16/2003	97	
3	5000002	11000	2/18/2004	97	
3	5000002	11000	2/16/2004	97	
3	5000002	11000	2/16/2004	97	
3	5000002	11000	3/4/2004	97	
3	5000002	11000	3/4/2004	97	
3	5000002	11000	3/4/2004	97	

**Date Range:** can be set to use either the Order Due Date or the Order Start date which is defined as the due date less the part lead time. The date used is determined in the Settings Tab.

**Product Selection:** work orders with parts that match the 3 selection boxes are included. If none are selected the selection criteria for the box is empty, meaning there is no selection taking place for this parameter.

**Component Selection:** similar to Product except that the selection is based on the parts in the order requirement detail table. Only orders with match requirements will be selected.

**Order Status:** orders are selected based on their status codes (STATUS\_10)

**Include Supply:** if selected the current on hand balances of component requirements are augmented by the total DUEQTY\_10 of all supply orders with a STATUS\_10 = "3" and CURDUE\_10 <= the To Date on the form.

**Buttons:**

1. **Get Orders:** does the query to retrieve all the work orders which meet the selection criteria.
2. **Select All:** marks all the displayed orders. The first 4 characters of the REQUES\_10 filed are set = ".cp." to indicate Marked. The corresponding Requirement details have their UDFKEY\_11 set in the same way. Positions 8 -11 contain a Pick Quantity in the format "0000".
3. **Roll BackDue:** only is visible if Due Dates have been changed. This will undue the recent date changes. When the dates are changed ORGDUE\_10 is set = CURDUE\_10, CURDUE\_10 is set to new date and VENID\_10 is set = ".dc.".
4. **Refresh:** sort and redisplay the current orders.
5. **Approve Orders:** promote marked orders from Status 1 to 2.
6. **Release Orders:** release marked approved orders setting their status codes to 3 and inserting the job progress data for each released order. Generated automatic replenishment orders for those parts which are short and have are under Kanban control.

Consolidated Shortage Report:

Part Number	Component	Description	Qty On Hand	Pick Qty	Shortage
30000087	12100	System Unit	0.00	0.00	-4.396
30000087	13000	TEST UNIT 24 VOLT	0.00	0.00	-17.627
30000087	13100	Monitor, 17\"/>			

Pick Function:

Marked	Due Date	Priority	Part No	Work Order	Sales Order	Customer	Order Qty	Bal Due	Comp Kits	Pick Qty	Planner	Buyer	Commodity
<input checked="" type="checkbox"/>	09/11/02	3	11000	30000001			97	97	28	28	PL1		TV
<input type="checkbox"/>	11/26/03	1	11050	30000002	20000056-02-C	300	75	75	0	0	PL1		CC
<input type="checkbox"/>	12/17/03	3	11000	50000004			97	97	0	0	PL1		TV
<input checked="" type="checkbox"/>	01/07/04	2	RYEBREA	30000003			888	888	126	126	000	000	COMP:ZZ
<input checked="" type="checkbox"/>	02/02/04	1	RYEBREA	30000004			126	126	0	0	000	000	COMP:ZZ
<input type="checkbox"/>	02/17/04	3	11000	50000020			97	97	0	0	PL1		TV
<input type="checkbox"/>	02/17/04	3	11000	50000021			97	97	0	0	PL1		TV
<input type="checkbox"/>	02/17/04	3	11000	50000022			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/05/04	3	11000	50000026			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/05/04	3	11000	50000027			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/05/04	3	11000	50000028			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/05/04	3	11000	50000029			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/05/04	3	11000	50000030			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/08/04	3	11000	50000031			97	97	0	0	PL1		TV
<input type="checkbox"/>	03/31/04	2	11000	30000008			106	106	0	0	PL1		TV
<input type="checkbox"/>	03/31/04	3	11000	50000032			97	97	0	0	PL1		TV
<input type="checkbox"/>	04/01/04	3	11000	50000033			97	97	0	0	PL1		TV
<input type="checkbox"/>	05/03/04	3	11000	50000034			97	97	0	0	PL1		TV
<input type="checkbox"/>	05/11/04	3	11000	50000035			97	97	0	0	PL1		TV
<input type="checkbox"/>	06/02/04	3	11000	50000037			97	97	0	0	PL1		TV
<input type="checkbox"/>	06/02/04	3	11000	50000038			97	97	0	0	PL1		TV
<input type="checkbox"/>	06/24/04	3	11000	50000039			97	97	0	0	PL1		TV

Orders are selected based on matching the checked models, and the checked Warehouse locations within the date range. Released orders will display.

Consolidated Pick List:

Work Inquiry

Start Date: 10/25/2006 End Date: 10/25/2006 Report: ConPickList.Rpt

Record Selection: Preview to Screen

SELECT "Order\_Master"."STATUS\_10", "Order\_Master"."TYPE\_10", "Requirement\_Detail1"."DUQTY\_11", "Requirement\_Detail1"."PRTNUM\_11", "Part\_Master"."PHDES1\_01", "Order\_Master"."REQES\_10",

10/25/2006 13:14:19

### CONSOLIDATED PICK LIST REPORT

Page 1 of 1

Work Order	PartID	Customer	Bal.Due	PickQty	Due Date
30000001	11000		97.00	28.00	9/11/2002
30000003	RYEBREAD		888.00	126.00	1/7/2004
30000004	RYEBREAD		126.00	0.00	2/2/2004

Picked By:

Received By:

Stock Loc.	Component	Description	Qty. OH	Pick Qty	Picked
<b>FGI</b>	FLOUR	WHEAT MILLED .555	100,000.00	100.80	-----
	SUGAR	CANE 50 # BAGGED	100,000.00	12.60	-----
<b>MSI</b>	12100	System Unit	999,988.00	28.00	-----
	13990	Box, Cardboard Shipping	999,999.00	28.00	-----
	SALT	HCL 99.5 PURE FDA 444	100,000.00	6.30	-----
	SEEDS	RYE SEEDS	100,000.00	6.30	-----
<b>RMI</b>	13000	TEST UNIT 24 VOLT	1.00	28.00	-----
	13100	Monitor, 17" Standard Res	999,994.00	28.00	-----

Detail Work Order BOM: prints when inventory has been issued.

Work Inquiry

Start Date: 10/25/2006 End Date: 10/25/2006 Report: Detailed Work Order BOM.rpt

Record Selection: Preview to Screen

SELECT "Requirement\_Detail1"."PRTNUM\_11", "Part\_Master"."PHDES1\_01", "Order\_Master"."REQES\_10", "Order\_Master"."ORDNUM\_10", "Order\_Master"."PRTNUM\_10", "Requirement\_Detail1"."ISSQTY\_11"

10/25/2006 13:16:54

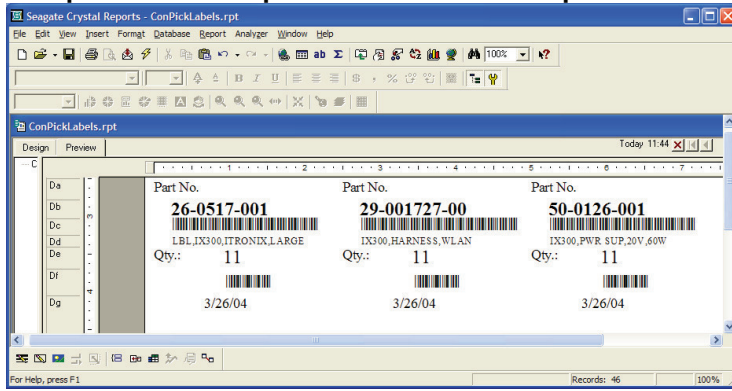
### Detailed Work Order BOM

Page 1 of 1

Due Date	PartID	Work Order	Customer	Released Qty
1/7/2004		30000003		126.00
9/11/2002		30000001		28.00

WorkOrder	Part Number	Component	Description	Picked Qty
30000001	11000	12100	System Unit	28.00
		13000	TEST UNIT 24 VOLT	8.00
		13100	Monitor, 17" Standard Res	28.00
		13990	Box, Cardboard Shipping	28.00
30000003	RYEBREAD	FLOUR	WHEAT MILLED .555	100.80
		SALT	HCL 99.5 PURE FDA 444	6.30
		SEEDS	RYE SEEDS	6.30
		SUGAR	CANE 50 # BAGGED	12.60

**Component Labels: printed after issues are processed.**



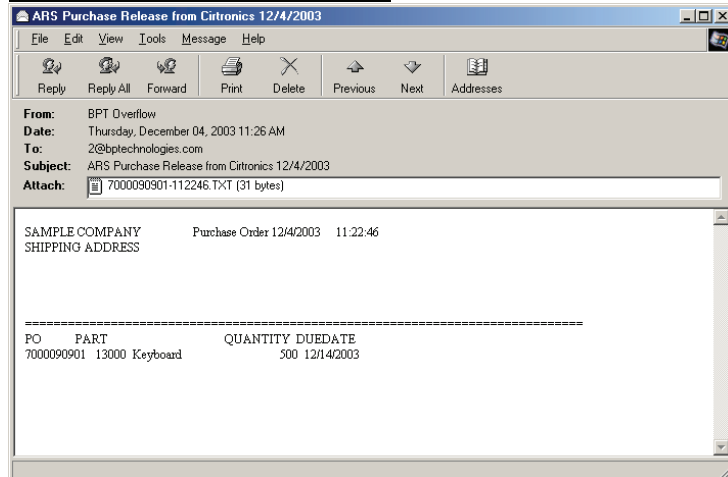
**Kanban Replenishment:**

The only user input is the part and an optional deliver to stock ID.

If the part is an authorized Kanban part and matches the criteria to be order and new line item will be added to an existing Kanban purchase order if one exists or if none exists a new purchase order will be created.

An email can be sent immediately to vendor or a comprehensive email can be sent showing everything ordered for the day or since last sent.

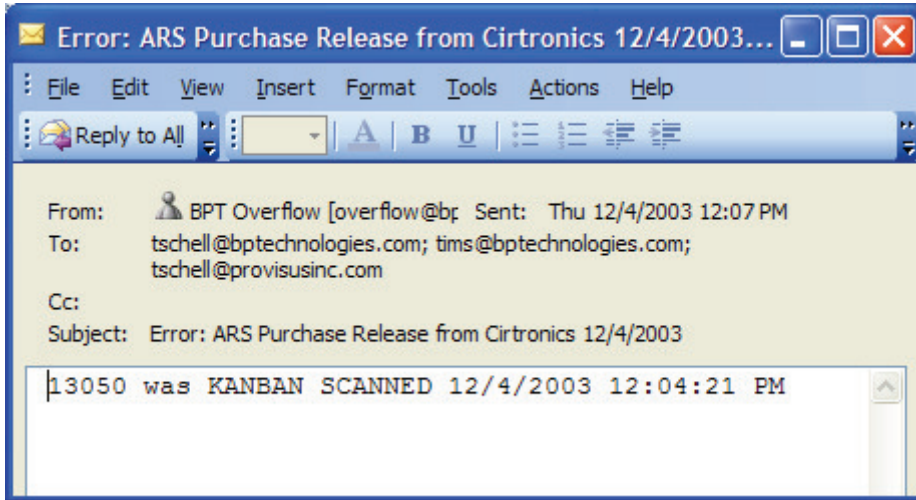
**PO Created Email to Vendor:**



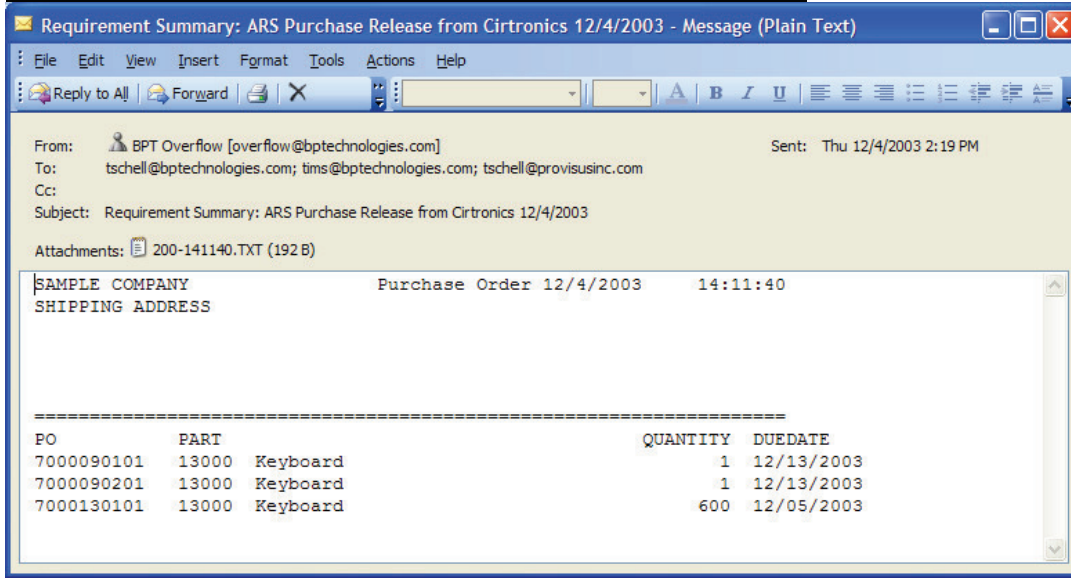
**Attachment:**

7000090901,13000,Keyboard,500,12/14/2003

Kanban scanned in Error Internal EMail:



Vendor Summary Emailed to Vendor and to Internal Address:



Summary Attachment:

7000090101,13000,Keyboard,1,12/13/2003  
 7000090201,13000,Keyboard,1,12/13/2003  
 7000130101,13000, Keyboard,600,12/05/2003

**Back Flush By Operation:**

This utility will issue components that have been identified to be picked using PickPro at the entered operation sequence. Optionally the operation quantity can be posted with a Post Operation transaction.

BackFlush by Operation

Issue From:

Work Order:  Due:

Sequence

Quantity  Queue

**Components**

QtyPer	Comp	Description	StockID	OnHand
1.00	13990	Box, Cardboard Shipping	MSI	1293.00

**Job Progress**

OpSeq	Operatio	W/C	Type	Queue
0010	EASSY	Assemble Pe	U	0.00
0020	BURN	24 Hour Burr	B	9.00
0030	FINQA	Final Inspecti	U	91.00
0040	PACK	Pack and Sh	U	0.00
0900	HEAT	OUTSIDE	U	0.00
9999	PAINT	Costing Only	U	0.00

**Issue From:** will default based on the LeanMAX settings to be either the individual component default Stock ID, the Stock ID associated with the Work center (see below) or an entered Stock ID which overrides the defaults.

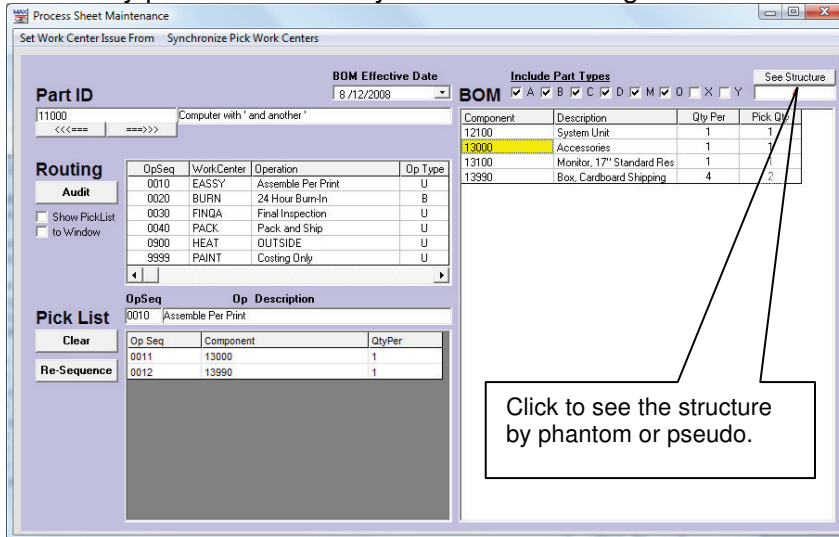
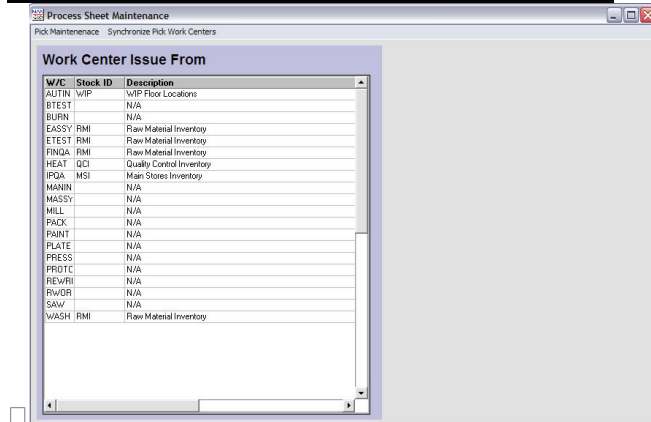
**Work Order:** open work order

**Sequence:** open operation

**Quantity:** quantity to back flush and/or post operation completion.

**PickPro Function:**

This utility provides the ability to maintain routing Pick entries based on the BOM of the part.

**Assign Stock Issue From to Work Centers:**

When a Part is selected the related single level exploded BOM (accounting for phantoms and pseudos) and Routing will display. When a particular Routing step is highlighted the Pick instructions which follow the selected operation will be displayed below.

Pick entries are added by right-clicking on the component in the BOM frame and dragging over to the Pick List frame. Double-clicking on the component will also move the component to the Pick List. To delete, reverse this move or change the quantity per to zero. Pick quantities can be changed to any quantity up to the total required quantity for that component.

**Please note:** this application allows you to enter the same part more than once within a routing and allows the quantity to be different than the required quantity on a given pick entry.

**Synchronize Pick Work Centers:** will audit the Pick operations to make sure the referenced Work center equals the linked to operation's work center.

**Clear:** will delete all of the Pick entries for a given operation.

**Re Sequence:** will renumber the Pick Entries.

**Audit:** will provide a quick quantity audit for a given part by comparing the BOM to the Pick entries. This can be sent directly to the printer (default) or viewed on-line.

PickPro - Notepad

File Edit Search Help

5/2/01 PickPro Audit: 11000 COMPUTER Page 1

OpSeq	Description	Part	Qty
0010	GET THE THING STARTED		
0018	Pick:	13990	Box, Cardboard Shipping .50
0019	Pick:	12200	Cabinet 2.00
0020	24 Hour Burn-In		
0022	Pick:	13100	Monitor, 17" Standard Res 1.00
0023	Pick:	13000	Keyboard 1.00
0030	FIX TO STUB		
0032	Pick:	HUH	TEST OH .50
0033	Pick:	13100	Monitor, 17" Standard Res 1.00
0034	Pick:	12300	Mother Board 2.00
0050			
0054	Pick:	12200	Cabinet 1.00
0056	Pick:	13000	Keyboard 2.00
0057	Pick:	13210	Hard Drive, 4 GB 1.00
0058	Pick:	12300	Mother Board 2.00

■

5/2/01 PickPro Audit: 11000 COMPUTER Page 2

Component	Description	Qty_Required	Qty_Picked
12200	Cabinet	2.00	3.00 +
12300	Mother Board	2.00	4.00 +
13210	Hard Drive, 4 GB	2.00	1.00 -
13000	Keyboard	10.00	3.00 -
13100	Monitor, 17" Standard Res	1.00	2.00 +
13990	Box, Cardboard Shipping	1.00	.50 -
HUH	TEST OH	1.00	.50 -
		.00	.00
		.00	.00